Chapter 3

Lands, Roads, & Special Uses Assessments



Battle Creek Fire Rapid Assessment - September 2002		

ROADS

Pre-fire conditions

There are approximately 56 miles of classified national forest system road within the perimeter of the fire and an estimated 45 miles of "non-system roads" (unclassified) or other roads that had been closed or otherwise considered unnecessary for the management and use of the National Forest. Many of the unclassified roads had been closed or grown shut.

Post-fire conditions

Many of the unclassified roads were reopened during fire suppression efforts as fire breaks (dozer lines) and for equipment access. An estimated 28 miles of roads are within moderate and high severity burn areas (16 miles of classified and 12 miles of unclassified).

The Burned Area Emergency Rehabilitation (BAER) report covered those roads that are at risk within moderate and high severity. BAER also identified the need to clean and maintain the drainage structures on all of the Forest Service roads (both classified and unclassified) in all areas within the fire perimeter, with the exception of those unclassified roads that may be recontoured. Drainage cleaning specified in the BAER report should also include cattle guard cleaning.

Hydrologic analysis has been completed on a number of culverts on Forest Service, County, and State roads.

Recommendations

Begin work as soon as possible to implement the described work activities. Since other rehab work is in progress, it's important to accomplish as much as possible this field season.

Work not covered by BAER includes the following:

- Blade, shape, and define road templates for all system roads within the fire perimeter (56 miles).
- Replace surfacing lost on Beretta Road.
- Remove debris within defined channels upslope from drainage structures.

HAZARD TREES

Pre-fire conditions

Hazard trees along the roads and trails were treated on a case-by-case basis as the hazard was found along trails and open roads. Hazard trees were not treated along closed roads. Trees were generally sound, interspersed with limited numbers of diseased or dead.

Post-fire conditions

Many trees along the classified roads (16 miles) and unclassified roads (12 miles) within the moderate and high severity burned areas are dead and hazardous. Any road that had been closed by vegetation is now open. Hazards from falling trees now exist along 28 miles of road.



Recommendations

- The BAER request identified the need to treat 1,400 trees along roads within moderate and high severity, treat 100 trees along the burned portion of the Flume Trail, and complete further hazard tree assessment. Specifically hazard trees greater than 6-inch dbh should be directionally felled along contours to prevent jackstrawing.
- Further treatments are recommended along all roads that are open to use. Those roads that will be re-contoured will not need to be treated.

Evaluation and Monitoring

Annual monitoring to be completed by district timber and Recreation Resource Personnel.

TRAVEL MANAGEMENT

Pre-fire conditions

Prior to implementation of current travel management decisions, there are 56 miles of national forest system roads and 45 miles of non-system roads within the perimeter of the fire, bringing the total to 101 miles.

Travel Management decisions are currently covered under three separate resource decisions. The entire burned area had been included in the Hollow, Lakes, and Beagle NEPA decisions. Road decommissioning and implementation of the travel management decisions had not been completed since timber sale activity was ongoing or yet to be started.

The travel management analysis process was made using public input. All roads were identified in the analysis and decisions were made. Roads fall under the categories of:

- 1. open to motorized vehicles (66 miles open year long)
- 2. closed to motorized vehicles seasonally or yearlong (8 miles closed seasonally and 17 miles closed year long) and
- 3. roads to be decommissioned through obliteration or some other means (10 miles) for a total of 101 miles. See the Travel Management map.

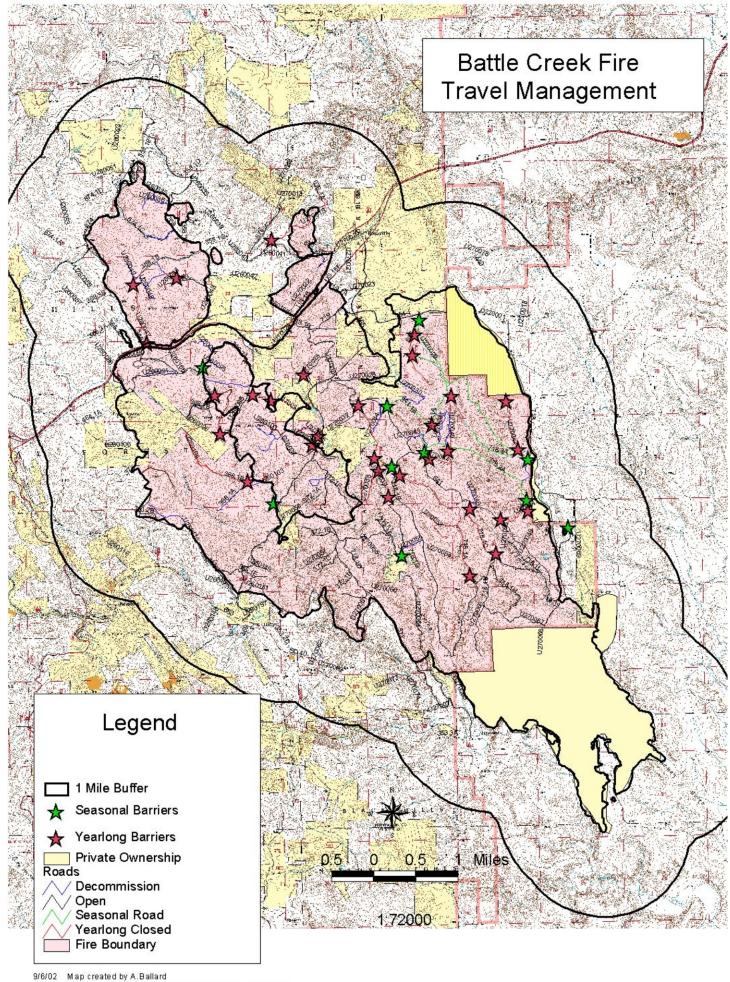
Post-fire Conditions

An estimated 28 miles of all road mileage (16 miles of classified and 12 miles of unclassified) are within moderate and high severity burn areas.

All opportunities for road screening and use of vegetative natural barriers were eliminated within moderate and high severity burned areas.

Fire suppression rehab continues on 52 miles of dozer and 2 miles of hand line. Approximately 7 miles of system roads and 7 miles of non-system roads were used for control lines.

Since a large portion of the area is burned, affects implementing travel management decisions (from the Hollow Lakes and Beagle NEPA decisions) at this time will be minimized.



Recommendations

- Implement existing Travel Management decisions immediately in those areas that are not affected by resource projects such as current timber sales and fire salvage projects.
- Apply effective road decommissioning methods.
 - Recontour roads to original slope
 - Use natural materials such as stumps, rocks and slash
 - Discourage "challenge barriers" such as tank traps and other unnatural barriers
- Apply effective road restriction methods for limiting use.
- Issue new orders regarding temporary post-burn resource needs such as soil and water protection, weed prevention, wildlife habitat needs and public safety.
 - Area closures to all off road motorized use in burned areas.
 - Restrict all motorized traffic to roads identified with a route marker within the burned area.
- Request additional law enforcement assistance to enforce road and area closures.
- Inform and involve user groups in implementation of these decisions.

Evaluation and Monitoring

- All methods used to implement travel management decisions must be regularly field checked to determine their effectiveness.
- Ask adjacent private landowners and the general public using the burn area if barriers are working or if changes are needed.
- Annual monitoring to be completed by engineering personnel.

LANDLINES

Pre-fire Conditions

Prior to the start of the Battle Creek Fire, all landline survey work had been completed designating the boundary between the Black Hills NF and private landowners. This represented approximately 24 miles of posted line.

Post-fire Conditions

The fire impacted approximately 18 miles of posted landline by burning the boundary signs and posts, witness trees and other designations of the legal boundary line.

Recommendations

- The remarking and resurveying of witness trees and corner markers should be accomplished immediately where the private property lines are within existing or proposed timber sale boundaries.
- Landlines to be reposted outside of existing timber activity, but adjacent to known
 encroachment cases should also be completed as soon as possible, to assist adjoining
 landowners in constructing new fences and/or remove personal property from the
 national forest.
- Any other remaining landlines should be reposted, following the completion of those in categories listed, above.

Evaluation And Monitoring

• Routine landline monitoring and maintenance of area is recommended.

SPECIAL USES

Pre-fire Conditions

Prior to the start of the Battle Creek Fire, Special Use authorization within the burn area consisted of utility lines, private road easements and snowplowing and road maintenance permits.

Post-fire Conditions

As a result of the fire, segments of the Black Hills Electric Coop and Quest Telephone Company utility lines have been damaged. In addition to the actual line damage, trees along the utility right-of-ways that have been killed or damaged by the fire will need to be removed to prevent them from falling onto undamaged lines.

Private road easements are undamaged by the fire suppression efforts of dozer and handline construction.

Snowplowing and light road maintenance permits issued to private landowners or road districts apply to Forest system roads. Many of these roads were used in the fire suppression effort as dozer lines, and were widened with the ditches removed or buried.

Utility companies are repairing their power and telephone lines that were damaged by the fire. These companies will require access to the lines through both private and national forest road systems. A preliminary review of the travel management restrictions in the burned area indicates that roads leading to the damaged lines will be left opened. Work on the lines will begin immediately. Removal of damaged or dead trees adjacent to the right-of-ways will be the responsibility of the utility companies. Access to these areas will have to be by existing roads or driving along the existing utility right-of-ways.

Progress on the system roads damaged by fire suppression efforts has already started. Rehab work currently being completed on roads where snowplowing and light maintenance permits have been issued should be completed by early October 2002. No additional work is anticipated these roads.

Recommendations

There are no actions recommended at this time. However, the following points should be noted:

- District staff will oversee the removal of merchantable trees within and adjacent to the right-of-way. Any removal of trees with timber value will be cruised or scaled to determine a price for the utility companies to purchase.
- Replacement of utility lines and/or poles will require complete removal of damaged items from the National Forest.

Evaluation And Monitoring

As requests for access are received by the utility companies to access both their damaged lines and dead tree removal areas, the district will evaluate the needs of these roads and any possible resource damage that may result.